Marcy (H. O.)

THE

RESTORATION OF THE PERINÆUM BY A NEW METHOD.

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THE RESTORATION OF THE PERINÆUM BY A NEW METHOD.

The anatomy of the perinæum has within the last few years become fairly well understood, and its importance demonstrated to be greater by far than was earlier supposed. The perineal body is now recognized as an anatomical entity, and is the key-stone in the arch of perineal support. Its physiological importance in parturition has been well demonstrated recently by Dr. Hart, of Edinburgh,—an understanding of which will do much to lessen the frequent occurrence of perineal lacerations. The lesion when partial is often overlooked; indeed, the gynæcologist, from his standpoint of observation, is inclined to feel that the injury, when it does not involve the sphincter ani, is in the majority of instances unrecognized. The two anatomical points most important to bear in mind in reference to the vagina and its value as a column of elastic support to the uterus, are that normally its walls, which are in close apposition, are near the vulvar outlet flattened laterally, but for the upper two-thirds of its length in the antero-posterior direction. Again, this vaginal support is normally a curve, the convexity of which is toward the sacrum, and this adds much to the elasticity, and thereby aids in holding within certain limits the uterus, which in health changes its position with every respiration and movement of the body. When the uterus is in its proper position this vaginal support is applied to the lower segment of the organ behind its center of gravity, as swung upon its lateral ligaments, and thus keeps the uterine body as it were anteverted—*i. e.*, thrown forward of its lateral moorings.

When the perineal body is ruptured the walls of the lower segment of the vagina no longer retain

their close apposition, but become relaxed to such a degree that in certain movements of the body they are separated; the antero-posterior vaginal folds slowly become everted, the cervical support is lost, the uterine axis is changed to a line with that of the weakened vagina, and then serves as a wedge, acting from above downwards, to separate its walls, already weakened, and thus may follow in procession the whole train of ills known by the various names—retroversion, retroflexion, prolapsus, cystocele, rectocele, with the changes of circulation, innervation, nutrition and disordered function of the whole pelvic viscera.

We will not now discuss the history of the operation, or the various methods from time to time recommended. Since these have been very numerous, and as the operation as still practiced varies in many of its details, it would seem to show that as yet no one plan has been determined upon as of superior excellence. The very imperfect results obtained teach that either the operation is very difficult or the methods put in practice imperfect. The chief defect where union has been obtained lies in the fact that the perineal body has not been restored, and the resulting perinæum is thin and yields excessively when put to strain, and this is often true when the vulvar orifice has been sufficiently closed. When the laceration involves the sphincter, the common failure after repair is a vaginal opening into the rectum just above the sphincter muscle.

The use of the interrupted stitch is almost universal, no matter in what other manner the operation may vary. To this I have long attributed in a very large share the defective results, and have thought it might be remedied by the complete and careful approximation of the edges of the divided or refreshened surfaces. However, this allows a possible separation of the parts, with retention of fluid and con-

sequent failure. The stitch may be taken so loosely as not to draw upon the enclosed portion and not lessen the depth of the triangle, but in this instance the tension is so little there is great liability to lateral separation and imperfect union. The end theoretically to be attained is simple approximation and retention, with complete rest of the parts without compression or distortion. This can never be secured by the ordinary loop of the stitch, since the force applied *must* act equally in every direction upon the enclosed portion. This is evidently true, no matter what the material used, iron or silver wire not excepted, when sufficiently plastic or yielding to accommodate itself to the surrounding parts. In homely illustration, it is the string to the bag, the opening to which is narrowed or occluded, dependent upon the tensile force applied. This is as self-evident in the stitch as in the ligature, except in the degree to which the constriction is carried. Other causes of defective results, usually very little emphasized, lie in imperfect approximation of the edges of the rent or refreshed parts, lack of care in the protection of the wound from the vaginal secretions, and the direction almost universally given to the patient to restrain the action of the bowels for a considerable number of days, or until the repair processes are quite advanced.

For a considerable period I have brought the edges of the wound into coaptation by the use of the over-and-over or continuous stitch, with the same care as exercised in a facial wound, using animal suture, since this requires no subsequent removal.

The profession is indebted to Dr. Jenks, of Chicago, for that which I consider a material advance as a substitute for the usual denudation or refreshing of the parts in sutures, where the sphincter ani is not involved. It consists of a careful separation of the mucous surface from the subjacent parts without in-

volving its integrity, and after the approximation of the denuded surfaces in the usual manner this mucous flap is allowed to fall back upon and over the wound. This is an effectual protection from vaginal secretions. In a number of instances I followed this method with most satisfactory results. The nutrition of the flap never failed, but shrinking and shriveling, it remained as soft mucous folds adherent to the vulvar orifice. The dissection may be made without much difficulty with a sharp knife of almost any shape, the recto-vaginal septa being kept tense by two fingers in the rectum. After a primary incision a probe pointed knife is to be preferred. A good pair of scissors answers equally well.

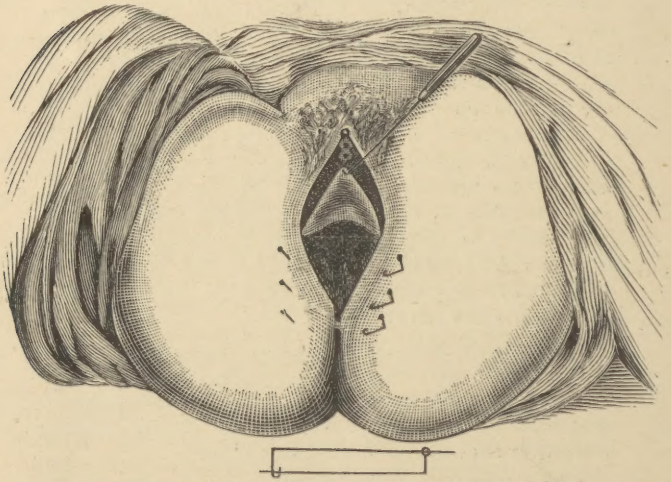

Plate I represents the denudation completed, and the pins already inserted ready for coaptation and fixation by clamping.

More recently I have separated the parts in a deeper layer in order to furnish a better nutrition to the superior flap, the surfaces of which are also approximated, and consequently the perineal triangle is

considerably deepened and strengthened. This reduces the open wound to the shorter side of the triangle, and lessens the dangers from infection to a marked degree.

When the rent involves the sphincter and rectum the parts are divided laterally in the same manner, commencing on the line of the V separation, and each of the upset coapted sides of the triangle brought into careful approximation with continuous animal suture, beginning with the rectal side.

Dr. Alexander Simpson, of Edinburgh, recommends bringing the refreshed parts into apposition, when the laceration is complete, by interrupted sutures taken from each of the three sides, since he has recognized that thereby he avoids the too usual rectal fistula at the point just above the sphincter muscle.

Dr. Emmett has observed that the tensile force of the stitch acting from above downwards, since this is the point of fixation, is liable to drag upon the upper angle of the wound, and thus produce a fistula; this he would prevent by an overlapping of the stitches. To obviate this difficulty, which we have above endeavored to show must pertain in a greater or less degree to the contracting force of the stitch, no matter how taken, and which must give a result more or less defective and often productive of complete failure, we have thought to apply the retaining power only laterally, and this by a process which at least by its simplicity must commend itself to all.

It is effected by means of a double pin, the halves of which are nearly alike. It is made of German silver wire, gauge No. 20 or 22, because this material does not irritate the tissues and possesses stiffness and elasticity, qualities which are essential. The end is bent in a small loop and turned one-fourth of an inch therefrom at a right angle, and the shaft is two to two and a half inches in length, and sharpened like the point of the needle of a subcutaneous syringe.

The one-half is introduced from the vagina *within* outward quite deep into the connective tissue laterally, the direction being determined by the finger placed in the rectum, to which the pin should be parallel. The other half of the pin, similarly constructed, is introduced from *without* inward upon the opposite side in the same manner, the point of which is caught in the loop of the first part and adjusted without. Thus a kind of "safety-pin" is constructed, and when fitted to retain properly the enclosed portions the loops are clamped down by compression forceps, and the ends cut square. This is found to hold sufficiently firm, but at first, fearing it might not be secure, I also clamped a perforated shot upon the wire. The shot renders the end of the pin less liable to cause irritation. If properly adjusted, the elasticity of the wire compensates for the collateral œdema, and does not impair the circulation in the

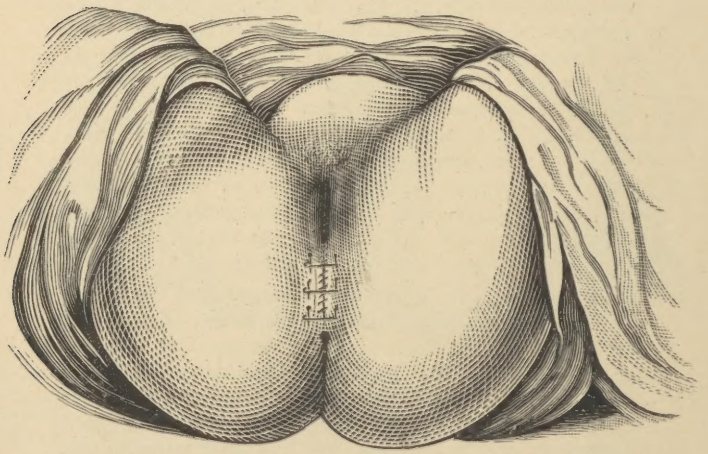

Plate II shows the operation completed and the careful adjustment of the edges by the over and over fine suture.

enclosed parts, while complete approximation is obtained, and no force is exercised in the direction of the long axis of the triangle. Two to four pins are required, as the case may demand. The subsequent treatment consists in most instances of a daily washing out of the rectum by means of a large double rubber tube with a considerable quantity, usually three or four quarts, of water as hot as comfortable to bear. Upon the eighth or tenth day, as thought wise, each pin is gently pushed upwards and the vaginal end exposed. Each side is then cut off near its juncture and withdrawn. I have used this support thus applied to the repaired perinæum only during the last eight months, and in six or seven instances. I grant these cases are far too limited to prove very much in the demonstration of the success of this new method, but they have given excellent results, and show the easy application by simple means of a method which certainly seems full of promise.

Needles made well by Codman & Shurtleff, of Boston, and Tieman & Co., of New York.